1	BINGHAM McCUTCHEN LLP WILLIAM D. KISSINGER (SBN 135276)	
2	Three Embarcadero Center San Francisco, CA 94111-4067	
3	Telephone: (415) 393-2000 Facsimile: (415) 393-2286	
4	NANCY SARACINO (SBN 117923)	
5	Chief Counsel	
6	California Department of Water Resources Office of the Chief Counsel	
7	1416 Ninth Street, Room 1118 PO Box 942836	
8	Sacramento, CA 94236-0001 Telephone: 916 653-7084	
	Facsimile: 916 654-9822	
9	ERIK SALTMARSH (SBN 156919)	
10	Chief Counsel California Electricity Oversight Board	
11	770 L Street, Suite 1250 Sacramento, CA 95814	
12	Telephone: (916) 322-8601	•
13	Facsimile: (916) 322-8591	
14	Attorneys for Plaintiffs CALIFORNIA DEPARTM	
15	WATER RESOURCES, CALIFORNIA ELECTRI OVERSIGHT BOARD	CITY
16		
	SUPERIOR COURT OF THE	STATE OF CALIFORNIA
17	COUNTY OF S	AN DIEGO
18		
19	Coordination Proceeding Special Title	J.C.C.P. Nos. 4221, 4224, 4226 and 4228
20	(Rule 1550(b))	DECLARATION OF PHILIP HANSER
21	NATURAL GAS ANTI-TRUST CASES	IN SUPPORT OF CALIFORNIA STATE AGENCIES' OPPOSITION TO
22	I, II, III & IV	PROPOSED PUBLICATION NOTICE
23		Date: January 13, 2006
24	[This Document Relates to the Southern	Time: 2:30 p.m. Place: Dept. 71
25	California Cases Only]	Judge: Coordination Trial Judge: Hon. Ronald S. Prager
26		11011. Rollaid B. 11agoi
27		DOCUMENT PREPARED ON RECYCLED PAPER
28	DECLARATION OF PHILLIP HANSER IN SUPPORT OF	CALIFORNIA STATE AGENCIES' OPPOSITION TO

PROPOSED PUBLICATION NOTICE

1	I, Philip Hanser, declare:
2	I am principal at The Brattle Group, which has been retained by the
3	California Attorney General to support it in litigation pending against Sempra brought by the
4	California Department of Water Resources ("CDWR"). I make this declaration in support of the
5	California Parties' Opposition to the Motion for Preliminary Approval of Class Action
6	Settlement. I am familiar with the facts and circumstances set forth in this Declaration and I
7	could and would testify thereto, if so called.
8	2. I have over twenty-five years experience in the electricity sector. I spent
9	five years at the Sacramento Municipal Utility District working in resource planning and rates.
10	For ten years I served as a Project Manager in, then Program Manager of the Demand-Side
11	Management Program of the Electric Power Research Institute. While at The Brattle Group, I
12	have provided expert testimony in a variety of forums, including the Federal Energy Regulatory
13	Commission ("FERC"), various state public utility commissions, and state and Federal court. I
14	was one of the California Parties' expert witnesses in the so-called "100 Days" matter before the
15	FERC.
16	3. CDWR currently has a demand before an arbitration panel (CDWR v.
17	Sempra Energy Resources, No. 74 Y 198 00193 04 VSS (AAA)), which claims various breaches
18	of the long-term purchase power agreement with Sempra and seeks damages and remedies for
19	those breaches. Included among the breaches is Sempra's alleged failure to deliver energy in
20	accordance with the agreement. I was retained by the California Attorney General's Office to
21	calculate damages for CDWR's electricity-related claims and have testified to my findings in the
22	form of a written report and oral testimony at hearing in November, 2005.
23	4. I understand that the arbitrators will rule on the pending arbitration in
24	April of this year.
25	
26	\$270 Million Savings is Grossly Overstated
27	5. Part of Sempra's settlement offer is a "Unilateral Limitation on the
28	1 DOCUMENT PREPARED ON RECYCLED PAPER
	DECLARATION OF PHILIP HANSER IN SUPPORT OF CALIFORNIA STATE AGENCIES' OPPOSITION TO PROPOSED PUBLICATION NOTICE

1	Exercise of Sempra Generation's Delivery Flexibility under CDWR Contract," whereby Sempra
2	would limit its deliveries to the California Independent System Operator's ("CAISO") southern
3	California congestion management zone ("SP15"), the Palo Verde scheduling point in Arizona,
4	and the interconnection points of its own generating facilities in California, Nevada, and
5	Arizona. The settlement appears to preclude Sempra from delivering to other individual points
6	inside SP15. It would discontinue delivering energy to other points outside California, such as
7	the CAISO's scheduling points at the California-Oregon Border ("COB"), North of Oregon
8	Border ("NOB"), and Four Corners, and to the CAISO's northern California congestion
9	management zone ("NP15").
10	6. The inflated value that Plaintiffs have placed on Sempra's offer presumes
11	a degree of delivery flexibility that CDWR asserts not to be permitted under the Contract. One
12	of CDWR's major claims in the pending arbitration is that points such as COB, NOB, and Four
13	Corners are not permissible delivery points. Assuming an arbitral outcome in DWR's favor,
14	Sempra would be barred from delivering to those points. In this circumstance, the value of that
15	part of Sempra's offer would be zero.
16	7. Even if the arbitration panel ruled that Sempra were permitted to deliver to
17	such points, Sempra's offer would be worth far less than \$270 million. I estimate a value of no
18	more than \$80 million, in part because Sempra would retain the flexibility to deliver all of the
19	power supplied under the contract to Palo Verde, which is itself a highly problematic delivery
20	point given the transmission congestion between there and California. My estimate is based
21	upon simulating the Western markets assuming Sempra can deliver anywhere versus the
22	alternative in which their delivery points are limited.
23	\$300 Million in Price Reductions is Illusory
24	Part of Sempra's offer is a price reduction of \$4.15/MWh on deliveries
25	under the CDWR contract, resulting in a \$300 million discount in aggregate between 2006 and
26	2011 (nominal dollars). However, as much as all of this discount "shall be reduced to account
27	for any CDWR Arbitration Offsets." CDWR Arbitration Offsets are defined as the total value
28_	2 DOCUMENT PREPARED ON RECYCLED PAPER
	DECLARATION OF PHILIP HANSER IN SUPPORT OF CALIFORNIA STATE AGENCIES' OPPOSITION TO PROPOSED PUBLICATION NOTICE

1	that Sempra loses in excess of \$150 million as a result of pending and future arbitrations with

2 CDWR, including increased costs or lost profits that result from both monetary and non-

3 monetary arbitration relief. For every additional dollar in value that Sempra loses in excess of

4 \$150 million, the aggregate price reduction in Sempra's offer is reduced by a dollar. If Sempra

5 loses more than \$450 million in value from pending and future arbitrations, the price reduction

disappears entirely. There are many scenarios in which this could occur.

9. One of the remedies sought by CDWR in the Arbitration is early termination of the Contract. If the panel grants CDWR this remedy, Sempra would lose more than \$1.5 billion in value, and the price reduction would be eliminated (apart from the Offset, a price reduction would not be applicable to a terminated contract). In addition, I am aware of another suit pending in this Court that seeks rescission of the contract as a result of Sempra's conduct relating to the contract. (See Sempra Energy Resources v. California Department of Water Resources, D043397 (4th App. Dist. 2005)).

10. Even if termination is not granted, Sempra could lose \$450 million or more as a result of current and future arbitrations, and the offered price reduction would be eliminated. CDWR is seeking \$173 million in compensatory damages in the current arbitration alone. In addition, if the arbitration panel provides declaratory relief on all of CDWR's claims, future ratepayer costs would be reduced by more than \$400 million, and Sempra's costs would increase over and above the compensatory damages by an equal amount. In addition, CDWR plans to pursue further arbitration to recover more than \$100 million in improper charges for energy that Sempra has billed CDWR but which it never produced. This claim, in combination with the pending arbitration, exposes Sempra to the loss of far more than \$450 million.

11. Thus, even if CDWR does not prevail on all of its claims, there are many scenarios in which the \$300 million discount that Sempra is offering as part of the current settlement would be materially reduced or eliminated.

DOCUMENT PREPARED ON RECYCLED PAPER

1	I declare under	r penalty of pe	erjury und	der the laws	of the State of	California tha	it the
2	foregoing is true and correct.	Executed this	s 12 th day	of January	2006.		
3				(A) S	\mathcal{L}		
4			Ву:	day of	p		
5				⁰ PHI	LIP HANSER		
6				€°			
7	•						
8							
9							
10							
11							
12							
13							
14			•				
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27			_		DOCUMENT PREPARI	ED ON BECVOLED F	ADED
28			4	,	JOGOWIEINI PREPARI	LO ON RECTULED P	

1 2 3 4 5 6 7 8	BINGHAM McCUTCHEN LLP WILLIAM D. KISSINGER (SBN 135276) Three Embarcadero Center San Francisco, CA 94111-4067 Telephone: (415) 393-2000 Facsimile: (415) 393-2286 NANCY SARACINO (SBN 117923) Chief Counsel California Department of Water Resources Office of the Chief Counsel 1416 Ninth Street, Room 1118 PO Box 942836 Sacramento, CA 94236-0001 Telephone: 916 653-7084 Facsimile: 916 654-9822	
10	ERIK SALTMARSH (SBN 156919) Chief Counsel	
11	California Electricity Oversight Board 770 L Street, Suite 1250	
12	Sacramento, CA 95814 Telephone: (916) 322-8601	
13	Facsimile: (916) 322-8591	
14 15	Attorneys for Plaintiffs CALIFORNIA DEPARTM WATER RESOURCES, CALIFORNIA ELECTRI OVERSIGHT BOARD	
16		
17	GUIDEDIOD COURT OF THE	
18	SUPERIOR COURT OF THE S	
19	COUNTY OF S.	AN DIEGO
20	Coordination Droppeding Special Title	LCCD Nov. 4221 4224 4226 and 4228
21	Coordination Proceeding Special Title (Rule 1550(b))	J.C.C.P. Nos. 4221, 4224, 4226 and 4228
22	NATURAL GAS ANTI-TRUST CASES I, II, III & IV	DECLARATION OF GERALD A. TAYLOR IN SUPPORT OF CALIFORNIA STATE AGENCIES'
23		OPPOSITION PROPOSED PUBLICATION NOTICE
24		Date: January 13, 2006
25	[This Document Relates to the Southern California Cases Only]	Time: 2:30 p.m. Place: Dept. 71
26		Judge: Coordination Trial Judge: Hon. Ronald S. Prager
27	•	· ·
28	<u> </u>	DOCUMENT PREPARED ON RECYCLED PAPER

1 I, Gerald A. Taylor, declare:

5

6

7

8

9

2 1. My name is Gerald A. (Gary) Taylor. My business address is 44 Brattle Street,

3 Cambridge, Massachusetts, 02138. I am a Principal of The Brattle Group, an economic

consulting firm with offices in Cambridge, MA; Washington, DC; San Francisco, CA;

London, England; and Brussels, Belgium. I have been employed at The Brattle Group

since 1990. I have been retained by the California Attorney General's Office to support

them in the above referenced proceeding. I make this declaration in support of the

California State Parties' Opposition to the Proposed Publication Notice. I am familiar

with the facts and circumstances set forth in this Declaration, and I could and would

testify thereto, if so called.

I have been involved in litigation and regulatory proceedings regarding California energy 2. 11 markets for over twenty-five years. My recent testimony on California markets includes 12 the following: Prepared Direct Testimony and Exhibits of Gerald Taylor on behalf of the 13 California Parties, Docket No. EL03-180-000, February 27, 2004 (Exhibit Nos. CP-1 – 14 CP-34); Prepared Supplemental Testimony of Gerald A. Taylor on behalf of the 15 California Parties, Docket No. EL03-180-000, January 31, 2005 (Exhibit Nos. CP-84 – 16 CP-134); Affidavit of Gerald Taylor on Behalf of the California Parties, Docket Nos. **17** EL00-95-045, EL00-98-042, May 21, 2003; Declaration of Gary A. Taylor on Behalf of the California Parties Re: Gaming Activities of the City of Redding, Docket Nos. EL03-18 149-000, EL03-183-000, September 30, 2003; Declaration of Gary A. Taylor on Behalf 19 of the California Utilities Re: Gaming Activities of Morgan Stanley Capital Group, **20** Docket Nos. EL03-160-000, EL03-195-000 (Not Consolidated), September 30, 2003; 21 Declaration of Gerald A. Taylor Re: Proposed Settlement With Coral Power L.L.C. on 22 Behalf of the California Parties, Docket Nos. EL03-151-000, EL03-186-000, December 23 4, 2004; Declaration of Gerald Taylor on Behalf of the California Parties Re: Proposed Settlement With Northern California Power Agency, Docket No.EL03-196-000, 24 February 4 2004; and Declaration of Gerald Taylor on Behalf of the California Parties 25 Re: Proposed Settlement With the City of Glendale, Docket Nos. EL03-137-000, and 26 EL03-180-000, February 17, 2004. My resume is provided as Appendix A.

28

27

DOCUMENT PREPARED ON RECYCLED PAPER

1	3.	I have been asked by the California State Parties to review and assess the Notice of
2		Settlement and Fairness Hearing in terms of its accuracy and completeness. In addition
3		to the Notice, I have reviewed the Proposed Settlement Agreement and the Declaration of
4		Dr. Andrew Safir in Support of Plaintiffs' Motion for Preliminary Approval of the
5 .		Proposed Settlement Between Plaintiffs and Defendants along with the Motion and the
6		other accompanying supporting materials.
7	4.	Upon review of these materials, I have reached the following conclusions:
8		a) The representation in the Notice that consideration to the class will include
9		\$325 million in cash payments paid in eight annual installments does not make
10		clear that up to \$170 million of this cash consideration will be paid "up front" to
11		Plaintiffs' attorneys in the first two years;
12		b) The \$74 million in consideration purported to result from discounted sales
13		of "natural gas from a Sempra facility in Mexico" is contingent upon Sempra's
14		future management decisions and Mexican regulatory authorities and thus quite
15		speculative;
16		c) The \$745 million benefit to the class purportedly to come from "structural
17		changes to utility operations of the Sempra Defendants" is far overstated because
18		it is contingent upon uncertain future regulatory proceedings, is based upon
19		operational changes that Sempra has already proposed to California regulators,
20		and depends upon operational changes that actually enhance rather than constrain
21		Sempra market power; and
22		d) As a result of the foregoing factors, the Notice is inaccurate, incomplete
23		and misleading.
24	5.	The Notice in Section III, which purports to describe the terms of the settlement, states
25		that \$325 million in cash consideration will be paid to the Class in eight annual
26		installments. In Section IV, which describes the rights of class members, it states there
27		will be a final fairness hearing to approve the Settlement and consider an application
28		2 DOCUMENT PREPARED ON RECYCLED PAPER

2

from Plaintills attorneys for fees and costs of up to \$170 million. The proposed
Settlement Agreement in Section 4.1.(a) shows that the \$325 million in cash
consideration characterized in the Notice as going to class members actually consists of
\$159,400,000 payable to the Class in eight equal annual installment payments and
\$166,000,000 payable to the Class in two equal annual installment payments. The
second, more accelerated amount appears to be the source of funds to pay the bulk of the
claim from Plaintiffs' attorneys for fees and costs. On a present value basis the
comparative benefit to the class is even smaller. Using a 7% discount rate as applied in
the Settlement Agreement to value future cash flows [see, e.g., Sec. 4.1(b)(i)] the
payments to the class over eight years have a present value of \$127.3 million, while the
payments to the attorneys, paid out in the first two years, are worth \$160.6 million. By
failing to clearly explain the distribution of the \$325 million in cash payments, the Notice
is misleading as to the amount of the cash consideration that will actually benefit class
members.
The Notice, again in Section III, states that the class will derive a benefit of \$74 million
from a discount on natural gas sales from Sempra facilities in Mexico. The nature and
terms of these sales are set out in Attachment B to the Settlement Agreement. The gas in
question is re-gasified LNG to which Sempra is entitled at its Baja California facility in
excess of its commitments to Mexican buyers, which would include its own international
subsidiaries. The gas is to be sold at a discount of \$.02/MMBtu from the California
Border Index price to Sempra subsidiaries, SDG&E or SoCal Gas. This \$74 million is
highly speculative because: a) Sempra retains the right to sell the gas in Mexico, if this
is advantageous; and b) Sempra affiliates in California have the right to refuse the sale if
Sempra has a more attractive sale opportunity in the United States. Furthermore, the
discount offered is from the California Border Index price, the very price that Sempra is
alleged to have manipulated in the proceedings before the Court. The sale provision
actually gives Sempra an incentive to elevate the Border Price. Since, as noted below,
3 DOCUMENT PREPARED ON RECYCLED PAPER

6.

1		the Settlement does not assure that Sempra's ability to influence this price will be
2		effectively constrained, the discount is illusory. For these reasons it is highly unlikely
3		that class members will benefit from the discounted gas sales in an amount anywhere
4		near the \$74 million claimed, if at all.
5	7.	The largest portion of the consideration claimed for the Class in Section III of the Notice
6		is \$745 million attributed to structural changes in the operations of Sempra Defendants
7		So Cal Gas and SDG&E. Such changes, described in Attachment A to the Settlement
8		Agreement, according to the proponents, will prevent Sempra from exercising market
9		power and result in the price of natural gas purchased at the California Border being
10		lower in the future by a significant amount. [See, Safir Declaration at paragraph 7,
11		paragraph 9.] This claimed benefit is overstated and in any event is entirely speculative
12		for several reasons. First, the Settlement Agreement only requires that Sempra propose
13		changes to the CPUC for approval, and not on their actual adoption or implementation
14		[Attachment A, Sec. I.A.]. Furthermore, no actual tariff language is offered, so the
15		changes that Sempra might put on the table can not be fairly evaluated. The outcome of
16		the CPUC proceedings is both uncertain and may be long in coming. Second, the
17		proposal would combine and integrate the facilities and procurement activities of So Cal
18		Gas and SDG&E thus enhancing Sempra market power in California rather than
19		constraining it. [Attachment A, Sec. I.A.1., Sec. II.A.2.] Third, proposed changes in
20		operations would not eliminate problematic aspects of Sempra's current operations such
21		as the GCIM [Attachment A, Sec. II.A.2.], and there is no provision removing control of
22		Hub Services from the Gas Acquisition (procurement) department, which leaves Gas
23		Acquisition with the same means and motive to manipulate prices that it had in the past.
24		Fourth, many of the changes proposed in the Settlement Agreement such as Firm Access
25		Rights [Attachment A, Sec. I.A.4.] and cost-based rates for So Cal Gas and SDG&E
26		intrastate gas transmission and distribution services have already been proposed in CPUC
27		proceedings or have already been implemented in So Cal Gas and SDG&E operations,
28		A DOCUMENT PREPARED ON RECYCLED PAPER

1	and thus, they offer no incremental value in the context of the Settlement Agreement.
2	There is no evidence at this time to establish that class members will derive any benefit
3	from changes to the operations of Sempra Defendants.
4	
5	I declare under penalty of perjury under the laws of the State of California that the
6	foregoing is true and correct. Executed this 12 th day of January 2006.
7	A
8	By: Benefit a South
9	GERALD A.TAYLOR
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	DOCUMENT PREPARED ON RECYCLED PARED

DOCUMENT PREPARED ON RECYCLED PAPER

Mr. Taylor's areas of expertise include contract and market incentives, antitrust and regulatory economics. His consulting activities have focused upon litigation and regulatory proceedings in the petroleum, natural gas, electric power and transportation industries. Mr. Taylor has also provided assistance to clients in matters involving corporate financial and strategic planning. Prior to founding Incentives Research in 1983, he worked for the firm of Putnam, Hayes & Bartlett. He received an M.S. with concentrations in finance and planning from the M.I.T. Sloan School of Management in 1978, a J.D. from the University of Kansas in 1973, and a B.A. in History from the University of Kansas in 1970.

CONSULTING EXPERIENCE

- For the California Parties litigation support and testimony regarding manipulation of electric power and natural gas prices in the western U.S. during 200-01. The proceeding, before the Federal Energy Regulatory Commission involved Enron, Dynegy, Mirant, Reliant, Williams, Powerex and many other suppliers in the U.S. and Canada.
- For the State of California an investigation of the impacts of the activities of the El Paso companies upon natural gas and electric power prices in California Markets. This investigation addressed pipeline operations and capacity, affiliate abuse, and potential collusion.
- For a private litigant analysis of the impacts of OPEC cartel activities on petroleum products prices in the United States during the period from March 1999 to the end of 2000. The assessment included the development of a mean reversion model of oil prices that provided the basis for estimating oil prices in the absence of production restrictions undertaken by OPEC.
- In a proceeding before the Federal Energy Regulatory Commission an assessment of the impacts of price manipulation and market dysfunction in electric power spot markets upon the prices in forward power prices in contracts signed during the period of market dysfunction. The analysis was based upon the relationship between prices in forward power and natural gas contracts.
- For two electric utilities in the southwest an assessment of the market power implications of their proposed merger. The analysis required application of the Federal Energy Regulatory Commission's Appendix A methodology as well as that outlined in Department of Justice Horizontal Merger Guidelines. Existing modeling techniques were extended to encompass both a flow-based transmission representation and simultaneous, equilibrium market solution.
- For several major petroleum firms involved in litigation over a disputed patent for reformulated gasoline, a review of avoidance costs and a critique of estimates of both

avoidance costs and reasonable royalty rates provided by expert witnesses for the patent holder. This engagement required detailed assessment of gasoline product specifications, component blending characteristics and blending processes and costs.

- For a major industrial concern, an analysis of balancing charges proposed by an LDC for its natural gas transportation customers, including a review and assessment of actual balancing costs and preparation of alternative proposals for cost recovery.
- For a Pennsylvania electric utility company, assistance in assessing options for procuring and transporting natural gas for re-powering oil-fired generating plants and in developing regulatory strategies and support for conversion of an oil pipeline to gas service. The analysis, which included estimating the cost of procuring gas supply and transportation under terms offered by the franchised LDC and comparing this cost to those that could be achieved by dealing directly with interstate gas pipelines and gas suppliers, support the utility's application to interconnect with the interstates by converting an existing oil pipeline to gas service.
- For a large shipper of crude oil and petroleum products, an analysis of pipeline transportation rates proposed by a Midwestern carrier. Detailed assessment of carrier costs demonstrated rates were excessive even under "light-handed" oil pipeline regulatory standards.
- For a refiner in the western United States, an assessment of pipeline carrier concentration and market power in the Salt Lake City region and possible justifications for and market impacts of restrictive pipeline access terms proposed by a carrier.
- For the State of Connecticut, a review of the performance of the market for home heating oil in the Northeast during winter of 1989-90.
- For the State of Alaska, a review of litigation positions and damage evaluation models developed for a large-scale court action to recover unpaid royalties on crude production from the Alaska North Slope.
- For the Internal Revenue Service, an assessment of the appropriate price levels for Alaska North Slope and Cook Inlet crude oil production and of the Windfall Profits Tax liabilities of crude oil producers in Alaska; the engagement involved determination of crude value in end markets, evaluation of crude oil exchange transactions, determination of crude oil disposition by market area, estimation of appropriate marine, pipeline and gathering costs, and consideration of the impacts of tax levies and royalty interests.

- For the State of California, the plaintiff in an antitrust action, ongoing litigation support in the area of West Coast crude oil market conditions including analyses of market logistics, major oil company crude oil pricing, valuation and trading practices, an assessment of the competitiveness of prices established by major refining companies for crude oil produced in California and other West Coast fields, and the computation of damages resulting from non-competitive pricing.
- For the City of Long Beach, California, ongoing support in the assessment of major oil company crude oil trading practices and agreements and their implications with respect to valuation terms in contracts for the sale of crude oil produced from the Wilmington field. The analysis included modeling production and revenues resulting under alternative proposed contracting provisions.
- For a group proposing a large scale interstate natural gas pipeline project to serve the California enhanced oil recovery market, assistance in the development of expert testimony on the competitive benefits of the proposed project in support of a request for FERC certification.
- Assistance to counsel for a major oil company in an assessment of the competitive impacts of the Texaco/Getty merger.
- For a natural gas pipeline company, assistance in preparation of expert testimony on the economics and regulation of the U.S. natural gas industry for use in ongoing antitrust litigation.
- For a producer of silicon and silicon alloys, an assessment of allegations of price fixing. The engagement included analysis of and expert testimony regarding market structure, the behavior of market participants and prices in the marketplace. Particular attention was given to product, market definition, the impact of imports on domestic prices, the production costs of domestic producers, and the effects of contracting practices in the industry.
- For the Internal Revenue Service, an assessment of the value of the unregistered common stock of a large newspaper company obtained in a stock swap. Option pricing concepts and analyses of pricing in similar large block transactions established that the discounts claimed by the taxpayer as a result of trading restrictions on the shares were too large.
- For a large conglomerate, an assessment of damages arising from misrepresentations regarding the sales of a consumer appliance manufacturer being purchased by the company. The analysis involved estimating the magnitude of the misrepresentation and its impact upon the value of the purchased entity.

- For a large New York electric utility, development of testimony on the level of variance around stated estimates of output in purchased power contracts that is "commercially reasonable" in the context of PURPA and New York statutes regarding pricing of power sales by small independent power producers. The analysis required identification of sources of variance in capacity and output, assessment of how and by whom variances might be controlled, a review of the allocation of risks between the parties and the impacts of relevant legal restrictions and market conditions. Twenty-two separate contracts were involved in the litigation.
- For a Massachusetts electric utility, assistance in responding to federal and state initiatives to deregulate and restructure portions of the electric utility industry. The engagement involved assessment of the company's stranded investment exposure, assessment of potential market power problems in a restructured power market, the development of incentive rates for portions of the company that would remain regulated and the development of testimony in response to a wide range of specific proposals made by the Massachusetts Department of Public Utilities including the divestiture of utility generating assets.
- For a Massachusetts electric utility involved in arbitrating a contract damage claim, an evaluation of the impacts/benefits upon ratepayers of completing a development-stage, coal-fired NUG facility whose developer failed to meet contract performance requirements and deadlines. The engagement required review of renegotiated contract terms and application of the utility's capacity expansion planning/production costing models to assess the system impacts of proceeding under these new terms. The damage claims put forth by the NUG's expert were also reviewed and critiqued.
- For an electric utility in New England, assessment of the financial exposure that might result from the breach of a purchased power agreement with a non-utility generator. The NUG had an operating facility (QF) using renewable fuels. The engagement involved development of contract performance and financial impact models for both the utility and the NUG, development of approaches for addressing uncertainties in parameters affecting contract performance such as fuel (wood chips) and O&M costs and dispatch pool system lambdas, and assessment of the damage exposure and feasible settlement ranges involved in litigation.
- For NASA, an evaluation of the appropriate prices to be charged for "in space" services provided to possible commercial users of NASA's Space Station Polar Platform.
- For the U.S. Department of Energy, studies of the economic effects of alternative methods for establishing rates for petroleum pipelines with particular emphasis upon

the impacts of the procedures set out by the Federal Energy Regulatory Commission in the *Williams* 154 Opinion.

- For the State of California, an analysis of the financial impacts of alternative contractual approaches for leasing oil and gas rights to state-owned offshore properties.
- For a large combined gas and electric utility company, the development of an integrated, computer-based planning system which encompassed electric and gas demand and pricing, rates and required revenues, generation/production planning, and financial forecasting.
- For a major research institution, specification of a financial model as part of a comprehensive system (EGEAS) for use in capacity expansion planning by electric utility companies.
- For numerous utility companies throughout the United States, assessment of the
 financial feasibility of continued investment in coal and nuclear electric generating
 plants under construction. The engagement involved critiquing construction cost
 escalation estimates derived through econometric techniques and developing
 alternative estimates.
- For a financially distressed major electric utility in the Mid-Atlantic region, an assessment of innovative financing options for end-user conservation programs.
- For the U.S. Office of Technology Assessment, development of a linear programming based refinery operations model and database for all major U.S. refiners for use in assessing refinery efficiency and costs.

OTHER EXPERIENCE

- Research staff, Energy Laboratory, Massachusetts Institute of Technology. Mr.
 Taylor assessed the potential of photovoltaic power generation to displace central
 station alternatives. Included in the analysis was a review of the legal barriers to the
 penetration of photovoltaic technology.
- Staff attorney, Legal Services Corporation. Mr. Taylor practiced as part of a unit seeking to reform various aspects of the legal system for the benefit of clients with limited resources.

PUBLICATIONS

"Competition in Wholesale Electricity Markets," *Energy Law Journal*, Volume 23, No. 1, p. 101, January 2003 with Fox-Penner, Peter, Bohn, James, and Broehm, Romkaew

"Energy Markets: Time for a Broader Perspective", *The Brattle Group Energy Newsletter*, September 2000.

"Distributed Generation Technology in a Newly Competitive Electric Power Industry", with Paul R. Ammann and Johannes P. Pfeifenberger, in the proceedings for the American Power Conference, April 9-11, 1996.

"Improving the Allocation of California Water Supplies," with Frank C. Graves, Incentives Research working paper, October 1992.

An Economic Comparison of Alternative Methods of Regulating Oil Pipelines, with Paul R. Carpenter, Incentives Research, Inc. Report to the U.S. Department of Energy, Office of Competition, July 1985.

Oil Pipeline Rates and Profitability under Williams Opinion 154, with Paul R. Carpenter, Incentives Research, Inc. Report to the U.S. Department of Energy, Office of Competition, September 1984.

An Economic Analysis of Residential, Grid-Connected Solar Photovoltaic Power Systems, with Paul R. Carpenter, MIT Energy Laboratory Technical Report No. 78-007, May 1978.

TESTIMONIAL EXPERIENCE

In re Industrial Silicon Antitrust Litigation, Western District of Pennsylvania (1998). Damages testimony on behalf of defendant. Class action jury trial resulted in verdict for defendant.

San Diego Gas and Electric Co. v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, Docket Nos. E00)-95-045, EL00-98-042, May 17, 2003. Testimony on behalf of the California Parties (a group of purchasers and governmental entities including the California Attorney General) regarding the cost of natural gas fuel for electric generation in western markets.

Morgan Stanley Capital Group, Inc., Federal Energy Regulatory Commission, Docket Nos. EL03-160-000, EL03-195-000, September 26, 2003; City of Redding, California, Federal Energy Regulatory Commission, Docket Nos. EL03-49-000, EL03-183-000, September 26, 2003; Coral Power, L.L.C., Federal Energy Regulatory Commission, Docket Nos. EL03-151-000, EL03-186-000, December 4, 2003. Testimony regarding the inappropriateness of proposed settlements of allegations of manipulation and misconduct in California electric power markets.

Prepared Direct Testimony of Gerald Taylor on Behalf of the California Parties, Docket No. EL03-180-000, February 27, 2004. Testimony on behalf of the California Parties to comment upon the filing of Enron Power Marketing, Inc., Enron Energy Services, Inc. and Public Service Co. of New Mexico in response to the Commission's Order to Show Cause Concerning the Use of Partnerships, Alliances or Other Arrangements to engage in Gaming and/or Anomalous Market Behavior.